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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,569	02/25/2005	Terry Cassaday	56836.40/ejg	3042
33797 7590 12/26/2007 MILLER THOMPSON, LLP Scotia Plaza 40 King Street West, Suite 5800 TORONTO, ON M5H 3S1 CANADA			EXAMINER MCPARTLIN, SARAH BURNHAM	
			ART UNIT 3636	PAPER NUMBER
			MAIL DATE 12/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/525,569

Applicant(s)

CASSADAY, TERRY

Examiner

Sarah B. McPartlin

Art Unit

3636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 16, 19-23, 25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 16, 19-23, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 22-23 are objected to because of the following informalities: Claim 22, line 3: The phrase "the controls" lacks sufficient antecedent basis. Claim 23 is objected to as being dependent from claim 22. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 8-12, 16, 19, 21, 22, 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Gruteser et al. (6,870,477). With respect to claim 1, Gruteser et al. discloses a member (100) selected from the group of members consisting of a chair member, a bed member and a lounge member, said member (100) having: moving parts (unlabeled), in the form of a seat or back that is deformable (column 6, line 20), controls (210) for the moving parts, and information output circuitry (110)(130)(140)(145) which outputs information regarding the operation of the controls for the moving parts (i.e. the sensor detects an occupant, relays information to remote systems (225) which in turn relays information to the effectors (210) which control the

moving parts) from said member (100), and an energy converter, either in the form of "solar cells" (column 5, line 17), or wheels (105) "used to generate electricity" (column 5, line 29), which convert energy to which the member (100) is exposed to electrical energy for powering said information output circuitry (110)(130)(140)(145) to generate information regarding the operation of the controls (210) for the moving parts.

With respect to claim 2, said energy converter comprises a solar panel provided on an exposed surface of said member given that "solar cells" can be used to provide the seat with electrical energy without the need for wires (column 5, lines 14-16).

With respect to claim 3, said information output circuitry (110)(130)(140)(145) is further linked to a sensor used to detect a human heartbeat (column 3, lines 21-27).

With respect to claim 4, a digital display, in the form of a PC with an input device and display (column 6, lines 4-7) also powered by said energy converter (given that the digital display is part of the chair systems (215)) and displaying information from said biorhythm sensor.

With respect to claim 5, said member (100) comprises a chair and said energy converter converts motion of a moveable portion of the chair (i.e. forward and backward motion of the chair back (column 5, lines 23-25) or rotational motion of the wheels (105)) to electrical energy.

With respect to claim 6, Gruteser discloses a member (100) from the group of member consisting of a chair member, a bed member and a lounge member, said member (100) including an information output device (110)(130)(140)(145)(240) which outputs information concerning the operation of said member (100), an energy

converter either in the form of "solar cells" (column 5, line 17), or wheels (105) "used to generate electricity" (column 5, line 29), which convert energy to which the member (100) is exposed to electrical energy for powering said information output device (110)(130)(140)(145)(240), wherein said member comprises a chair and information output device (110)(130)(140)(145) comprises a control (240) for a moveable part of said chair (i.e. a "vibrator" (column 6, line 23) or a deformable part of the seat or back of the chair (column 6, line 22)), said control (240) outputting information (received by effectors (210)) regarding direction to the use of said control without producing movement of the chair (column 6, lines 7-12).

With respect to claim 8, a visual display, in the form of a pc, is also powered by said energy converter, said visual display visually displaying the directions of use of the control.

With respect to claim 9, an electrical rechargeable power pack (212) which is charged by said energy converter, said power pack storing the electrical energy and dispersing the electrical energy as required.

With respect to claim 10, said member (100) comprises a chair having rolling casters (105) for generating said electrical energy.

With respect to claim 11, said member comprises a chair and said chair has a back and a seat and a moveable hinge between said back and seat for generating said electrical energy (column 5, lines 20-23).

With respect to claim 12, electrically operated body repositioning means, in the form of deforming seat or back of the chair (column 6, lines 20-21) is powered by said energy converter.

With respect to claim 16, Gruteser discloses a chair (100) having electrical power requirements including information output circuitry (110)(130)(140)(145) for generating information regarding the use of controls (210) for the electrical power requirements, and a generator (unlabeled) carried by said chair (100) for converting energy to which the chair is exposed to electrical energy for powering said electrical power requirements, whereby said generator converts rolling motion of said chair (100) to electrical energy for meeting said electrical power requirements and wherein said chair (100) includes moveable casters (105) and said generator is disposed in said casters (105) for converting motion of said casters (105) to said electrical energy for powering said information output circuitry (110)(130)(140)(145) to generate information regarding use of the controls (210) for the electrical power requirements.

With respect to claim 19, further including a rechargeable battery (212) carried by said chair (100) wherein said generator recharges said battery (212), said battery powering said electrical power requirements of said chair.

With respect to claim 21, Gruteser discloses a chair (100) comprising an information output device (110)(130)(140), which outputs information concerning controls (210) for moving the chair and rolling casters (105) for generating said electrical energy for powering said information output device (110)(130)(140).

With respect to claim 22, Gruteser discloses a chair (100) comprising an information output device (110)(130)(140) which outputs information concerning the use of controls (210), an energy converter, in the form of "a means for producing electricity based upon the linear motion of elements" (column 5, lines 24-25), and a moveable hinge which facilitates movement when the chair occupant leans back or forward causing elements of the chair to move with respect to each other, wherein said energy converter converts energy for powering said information output device (110)(130)(140).

With respect to claim 25, Gruteser discloses a member (100) selected from the group of members consisting of a chair member, a bed member and a lounge member, said member (100) including moving parts (unlabeled) and controls (210) for the moving parts, and including information circuitry (110)(130)(140)(145) which outputs information about operation of the control (210) about said member (100) and an energy converter (105) disposed on said member (100) for converting energy to which the member is exposed to electrical energy for powering said information circuitry (110)(130)(140)(145) to generate information regarding the operation of the controls (210) for the moving parts.

With respect to claim 26, the energy converter powers the moving parts and the controls for the moving parts (column 4, line 55).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gruteser et al. (6,870,477) in view of Sparks (6,204,767). As disclosed above, Gruteser disclosed all claimed elements except the provision of audio feedback from the control.

Sparks teaches the use of audio feedback, output from speaker element (10), triggered by control unit (34)(36)(38)(40).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to incorporate a sound signaling system into the chair (100) disclosed by Gruteser. Such a modification would enable people located in the vicinity of the seat to become aware of a situation regarding the seat occupant.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gruteser et al. (6,870,477) in view of Burt (US 2002/0056709). As disclosed above, Gruteser reveals all claimed elements with the exception of said body-repositioning means comprising a lumbar adjustment member controlled by a timer.

Burt teaches the use of lumbar supports (20) that include heated electrically conductive elastomeric materials. The expansion and contraction of the lumbar elements are traditionally controlled by a timer (paragraph [0004]) and provide a vibrating motion.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to add lumbar support elements to the seat disclosed by Gruteser.

Such a modification would ensure that seat occupants do not get fatigued backs while sitting in the seat.

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gruteser et al. (6,870,477). As disclosed above, Gruteser et al. discloses all claimed elements with the exception of a chair having both a movement generator and a solar power generator for supplying electricity to a chairs electronic display.

Gruteser does teach the use of a solar panel or the use of a movement generator. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use both energy generation mechanisms in a single chair since doing so would merely increase the performance of the seat.

8. Claims 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruteser et al. (6,870,477) in view of Deaton (2,838,095). As disclosed above, Gruteser et al. discloses all claimed elements with the exception of a hinge located between said back and said seat or between a seat and a pedestal.

Deaton discloses a hinge (16) located between a seat (S) and a back (34).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to locate the hinge in the seat disclosed by Gruteser in the position taught by Deaton. Such a hinge is well known in the art for providing user adjustability and improved comfort.

9. Claims 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruteser et al. (6,870,477) in view of Bell (2,310,346). As disclosed above, Gruteser et al. discloses all claimed elements with the exception of a hinge located between said back and said seat or between a seat and a pedestal.

Bell discloses a hinge (94) located between a seat (98) and a pedestal (10).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to locate the hinge in the seat disclosed by Gruteser in the position taught by Bell. Such a hinge is well known in the art for providing user adjustability and improved comfort.

Response to Amendment/Arguments

10. The amendment filed on June 27, 2007 has been considered in its entirety.

Applicant first argues that Gruteser nor any of the prior art teach an energy converter which converts energy to which the member is exposed to electrical energy for powering information output circuitry to generate information regarding the operation of the controls for the moving parts. The Examiner respectfully disagrees. Gruteser states that the "devices, sensors, wireless communication devices etc. of the chair generally require electrical energy in order to operate" (column 4, lines 55-57). Gruteser discloses how a wireless method/mechanism of transferring electrical energy to the chair may be used. This wireless method / mechanism may include inductive transfer of energy from an energy source positioned below the chair, solar cells positioned in the external surfaces of the platform of the chair, the movement of a person in the chair or

the rotational motion of chair wheels (105). The Examiner therefore maintains that the energy converter converts energy to which the member is exposed to electrical energy for powering the "devices, sensors, wireless communication devices etc." of the chair. The sensor (110) and elements (130)(140)(145), which all form parts of the information output circuitry, are "devices, sensors, wireless communication devices etc." The effectors (210), which control the moveable parts of the chair, are part of the on-board chair systems (215) which are powered by a wireless power supply (205) which may take on any of the forms disclosed above. Therefore, the Examiner maintains that the converted electrical energy is used to power the information output circuitry and the controls.

Applicant argues that Gruteser does not teach generation of electrical power for powering the information output circuitry to generate information regarding the controls for the electrical power requirements. As explained above, the Examiner contends that the generated energy powers elements (110)(130)(140) and effectors (210). The signal (145) emitted by sensor (110) constitutes information regarding the controls. Whether or not a seat occupant is present in the seat will effect the action of the controls (210) and the movement of the moveable parts. Therefore, the Examiner maintains that the electrical power powers the information output circuitry to "generate information regarding the controls for the electrical power requirements."

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah B. McPartlin whose telephone number is 571-272-6854. The examiner can normally be reached on M-Th 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/525,569
Art Unit: 3636

Page 12

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/Sarah B. McPartlin/
Primary Examiner
Art Unit 3636

SBM
December 20, 2007